ARLINGTON HALL STATION, BUILDING 401
4000 Arlington Boulevard
Arlington
Arlington County
Virginia

HABS NO. VA-1270-V

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
Mid-Atlantic Region
National Park Service
Department of the Interior
Philadephia, Pennsylvania 19106

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HISTORIC AMERICAN BUILDINGS SURVEY

ARLINGTON HALL STATION, BUILDING 401

HABS No. VA-1270-V

Location: Building 401 (Operations A Building) is located in the southwest quadrant of Arlington Hall Station at the intersection of Sixth and B Streets. Arlington Hall Station is located at 4000 Arlington Boulevard, Arlington, Arlington County, Virginia.

USGS Alexandria VA Quadrangle. Universal Transverse Mercator Coordinates: 18.317500.4303820

Present Owner: General Services Administration

Present Occupant: United States Army

Present Use: Military Post

Significance: Building 401 is closely associated with the history of Arlington Hall Station as the headquarters of U.S. Army intelligence from 1942 to 1989. The building constituted part of the first major building program undertaken by the Army at Arlington Hall Station after acquisition of the property from Arlington Hall Junior College in 1942. The Army established its Signal Intelligence Service (SIS) at the former campus. The SIS had responsibility for cryptoanalysis of intercepted enemy messages, development of codes and ciphers for the Army, and production of Army cipher machines. The SIS scored several significant intelligence success during World War II, including the breaking of the Japanese military and diplomatic cipher systems. This work provided crucial intelligence information to Allied leaders.

Since World War II, Army intelligence agencies have continued to be headquartered at Arlington Hall Station. Their activities are largely cloaked in secrecy.

Building 401 is also significant as a massive example of the temporary military buildings erected throughout the United States during World War II. The building is of wood frame platform construction with asbestos Transite panels applied as siding. The entire building was erected within approximately ninety days. (For overview of Arlington Hall Station, see HABS No. VA-1270).

Part 1. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: 1942.

2. Architect/Engineer: A. Hamilton Wilson and U.S. Army.

3. Original and Subsequent Owners: U.S. Army (1942-1989), General Services Administration (1989-present).

4. Builders, contractors, suppliers: John McShain Incorporated.

5. Original plans and construction: A. Hamilton Wilson, 1942.

6. Alterations and additions: Building 401 has been altered and modified since its construction to accommodate the needs of the specific agencies housed in the building. In 1943 a single story addition, which functioned as a paper storage room for the post's print shop, was made to Wing One. In 1951, Wings Two, Three, Five, Six, Seven, and Eight, as well as the headhouse, were structurally reinforced with shoring to accommodate greater floor loads. An addition in the courtyard between Wings One and Two, constructed in 1951, served as research and development laboratories. In 1952 two of the building's courtyards were infilled with single story buildings to increase the floor space within the building.

   Other alterations and modifications to the building include the replacement of exterior Transite panels, the enclosing of docking platforms, the addition of steps and platforms, and the general removal and replacement of interior partitions.

B. Historical Context: The construction of Building 401 in 1942 is associated with Arlington Hall Station's role as the headquarters of U.S. Army intelligence during World War II. When the Army moved to Arlington Hall from overcrowded quarters in downtown Washington, all operations were located in the Main Building (Building 1) of the former school. Within months of this move, the Army realized that the wartime expansion of its intelligence activities required construction of a new building.

John McShain, Inc., of Philadelphia, was chosen as the contractor for the new building. McShain's firm had extensive experience in the construction of buildings for the federal government. McShain's firm also completed the construction of the Pentagon while engaged in work at Arlington Hall Station.

Construction began on the new building in September 1942. Designed by A. Hamilton Wilson, in conjunction with the Army, Building 401 conformed

to the standardized plans for temporary buildings developed by the Army and constructed throughout the United States. Specific information on the construction of the building remains classified, although photographs and field inspections indicate that it is of frame construction with an exterior cladding of Transite panels. This form of construction "was similar to that of other temporary buildings then being erected in Washington by various agencies."

Building 401 contained over 239,000 square feet of floor space and accommodated 2,200 people. The building is a simple two-story structure consisting of a headhouse with eight wings extending to the south. The headhouse originally contained sixty-seven first floor offices and fifty-eight second floor offices. A storeroom and large fireproof vault occupied the basement of the headhouse. Most of the floors in the building's wings were left as open plan space in the belief that a lack of partitions allowed efficient space allocation and utilization. The building also contained a 450-kilowatt emergency power plant located in a reinforced concrete vault. This emergency power would permit the continuation of critical operations in the event of a power failure.

By November 15, 1942 the IBM Unit of B Section and the Laboratory Section had moved from the Headquarters Building into Wings Seven and Eight of the new Operations Building. As other portions of the building were completed additional units vacated the Headquarters Building and relocated in the new facility. A cafeteria was constructed in the west end of the building in January 1943, and in September 1943 a one story addition to Wing One was completed to provide paper storage for the printing department.

In the years following World War II a variety of intelligence and intelligence related agencies occupied the building. Their work has remained classified.

Part II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: U.S. Army World War II temporary structure.

2. Condition of fabric: Good.

B. Description of Exterior:

1. Overall dimensions: The building is two stories in height with a partial basement. The plan consists of a headhouse, measuring approximately 607 feet by 50 feet, and eight parallel wings

projecting to the south at right angles from the headhouse, each wing measuring approximately 191 feet by 47 feet. Courtyards were formed by connecting passages between the wings. Three of the courtyards have been infilled with single story additions.

2. Foundations: Concrete block with brick facing.

3. Walls: Wood with exterior Transite panel sheathing.

4. Structural systems, framing: Wood platform framing with wood columns on the upper stories and concrete columns in the basement.

5. Porches, stoops, balconies, bulkheads: A concrete loading dock, measuring approximately 120 feet by 10 feet is located on the east facade. A flat roof above the loading dock is supported by steel pipe columns. A similar loading dock is located at the south end of Wing Seven. Wing Eight has an enclosed area the same size as the dock at Wing Seven. All exterior entrances have raised wood stoops.

6. Chimneys: An approximately six-story round brick smokestack is located between the southern portion of Wings Five and Six.

7. Openings:

   a. Doorways and doors: The principal entrance on the front, north, facade contains non-original aluminum and glass doors. Other exterior doors are single panel metal doors.

   b. Windows and shutters: Windows consist of eight-over-eight double-hung wood sash. Some window openings have been boarded over while others are provided with protective screening.

8. Roof:

   a. Shape, covering: Flat, built-up roof.

   b. Cornice, eaves: Simple projecting boxed parapet with aluminum flashing.

   c. Dormers, cupolas, towers: A "Blaw Knox" tower on a concrete base is located within the courtyard between Wings One and Two.

C. Description of Interior:

1. Floor Plans:

a. Basement: Full basement beneath Wing One, partial basement beneath Wing Five. The basement beneath Wing Five is used as the building's boiler house and is open plan. The portion under Wing One has a combination of corridors and randomly arranged rooms.

b. First floor: The first floor utilizes double-loaded corridors flanked by uniform office spaces.

c. Second floor: The second floor utilizes double-loaded corridors flanked by uniform office spaces.

2. Stairways: Dog-leg wood stairs with applied rubber treads and simple wood handrails. Stairwells are located within the seven building sections that connect the wings. Two stairwells placed symmetrically within the headhouse area.

3. Flooring: Wood flooring predominates with carpeting and linoleum present in certain wings.

4. Wall and ceiling finishes: Thin plasterboard walls and acoustical tile ceilings.

5. Openings:

a. Doorways and doors: Two-panel wood doors set in wood frames. The main corridor of the headhouse has paired multi-light wood doors.

b. Windows: Window openings are surrounded by plain wood molding.

6. Decorative features and trim: None.

7. Hardware: Metal.

8. Mechanical equipment:

a. Heating, air conditioning, ventilation: Various air cooling systems are used throughout. Cast iron steam-heated radiators are fed from a central heating plant. Mechanical duct work is exposed throughout.

b. Lighting: Fluorescent lighting throughout.

c. Plumbing: Standard plumbing systems throughout.

D. Site:

1. General setting and orientation: Building 401's front, north, facade runs parallel to B Street and faces towards Buildings 126 and 460, with Building 1 beyond. The building's rear, south, facade abuts the post's motor pool area and, at a lower elevation, a large parking lot. The building is located approximately 550 feet north of the George Mason Drive entrance gate.

2. Historic landscape design: Building 401 was constructed at the rear of the property owned by Arlington Hall Junior College. Prior to 1942 this area of the college grounds was wooded. The building's placement has no relation to the college's landscape design.

3. Outbuildings: A fixed mobile trailer is located between Wings Two and Three. A brick cooling tower is located south of Wing Two.

Part III. SOURCES OF INFORMATION

A. Original Architectural Drawings: On file at Facility Engineer's Office, Arlington Hall Station, Arlington, Virginia.

B. Early Views: Historic Photographs File. INSCOM Command Historian's Office, Fort Belvoir, Virginia.

C. Bibliography:

1. Primary and unpublished sources: *History of the Signal Security Agency*. Part of a classified 10 volume series. Declassified portions of the series on file at INSCOM Command Historian's Office, Fort Belvoir, Virginia.

2. Secondary and published sources: Finegan, John Patrick. *Military Intelligence -- A Picture History*. Arlington VA: History Office Deputy Chief of Staff, Operations, U.S. Army Intelligence and Security Command, 1985.

D. Likely Sources Not Yet Investigated: Classified material and files held by INSCOM, Fort Belvoir, Virginia and National Security Agency, Fort Meade, Virginia.

Part IV. PROJECT INFORMATION

This documentation was undertaken in September 1989 in accordance with a Memorandum of Agreement between the General Service Administration, the Virginia State Historic Preservation Officer, and the Advisory Council on Historic Preservation as a mitigative measure prior to the demolition of the subject buildings at Arlington Hall Station.

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